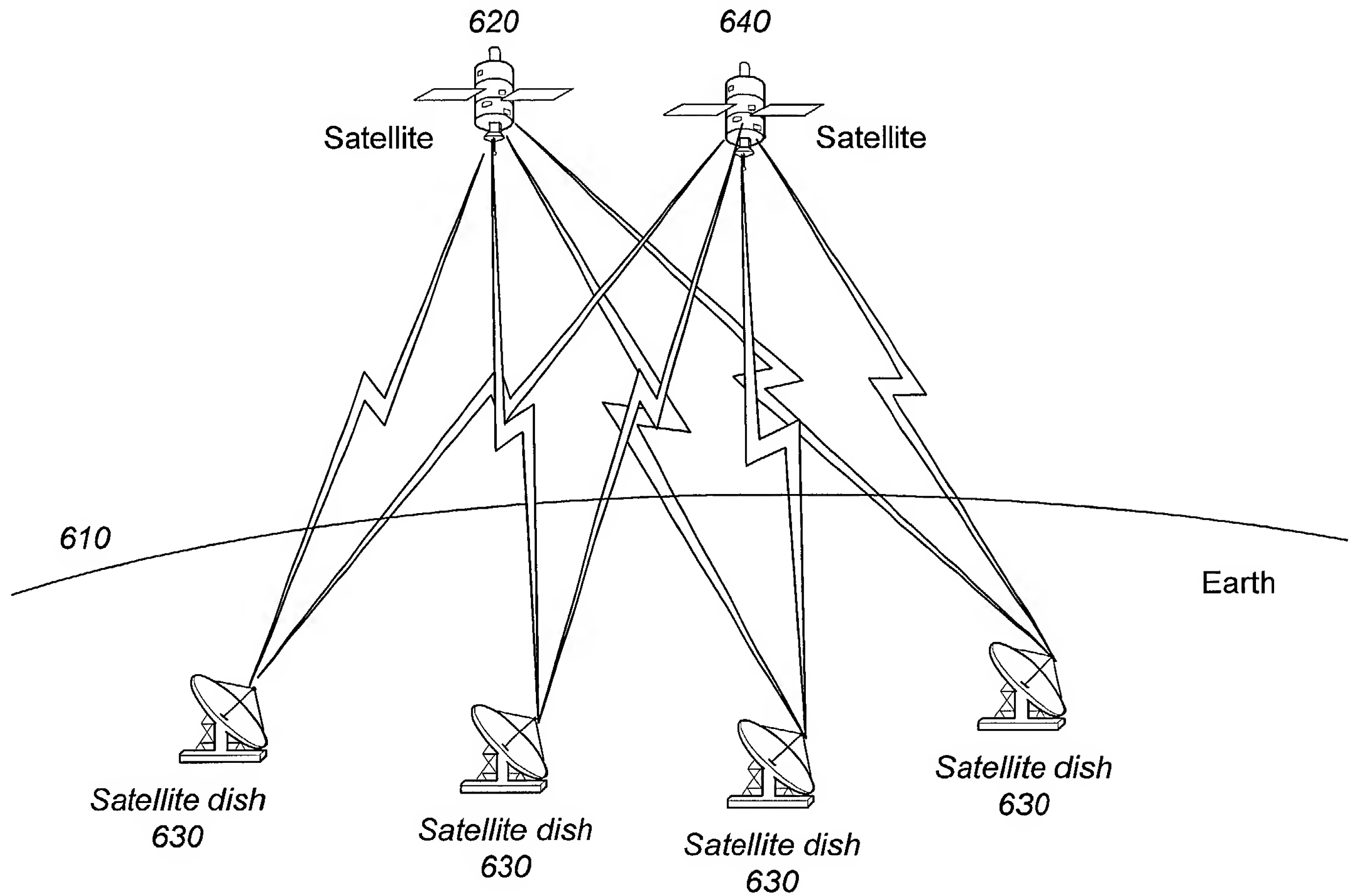

Figure 1
Prior Art

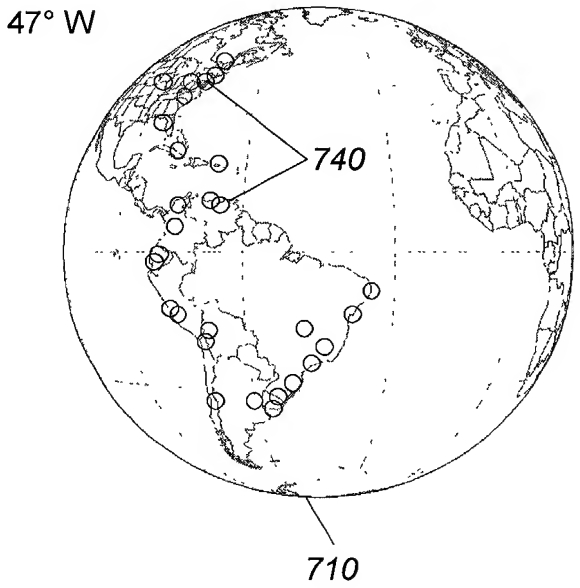

Figure 2
Prior Art

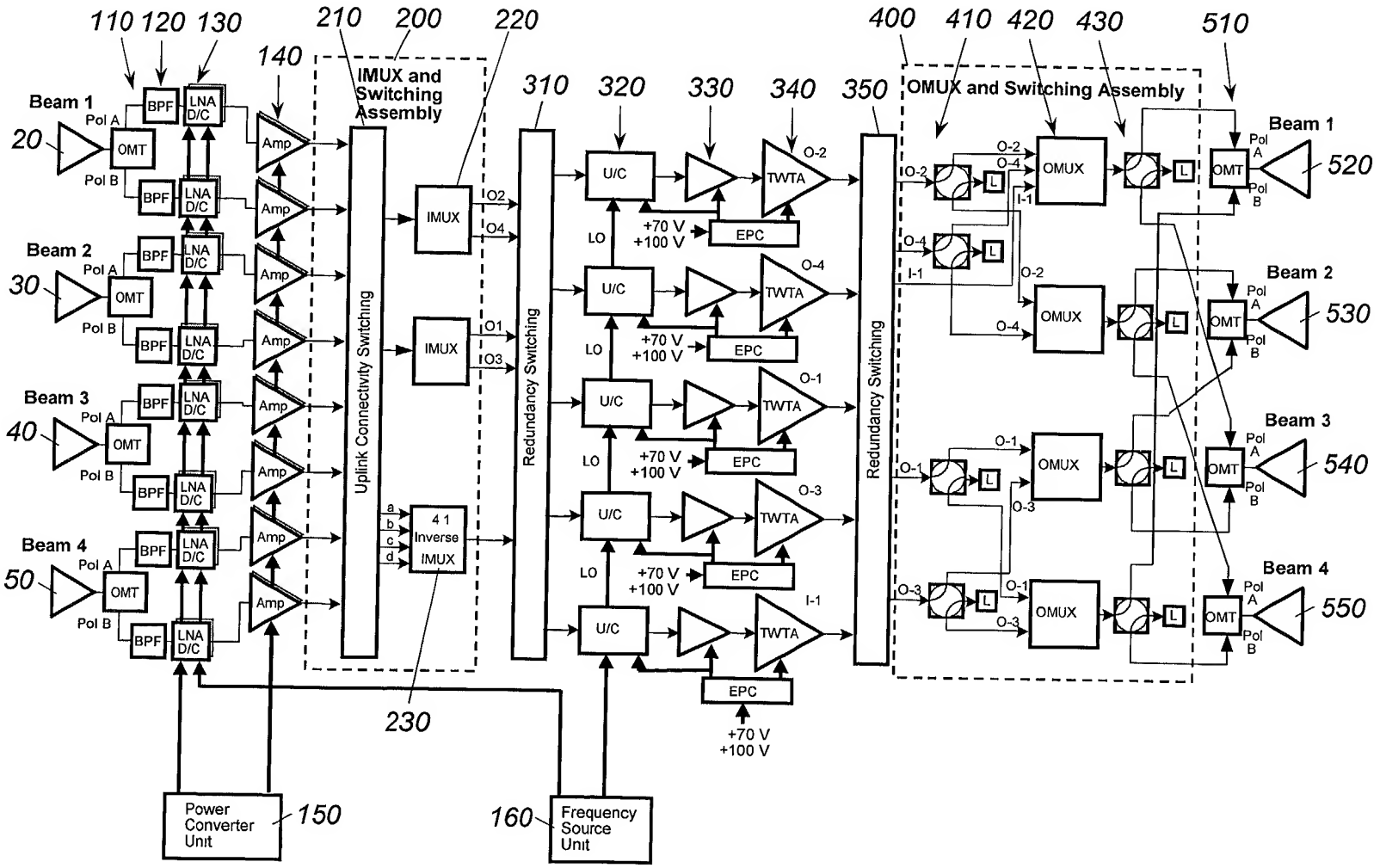
110 120 130
140
210
200
220
310
320
330
340
350
400
410
420
430
510
IMUX and Switching Assembly
OMUX and Switching Assembly
Beam 1
Beam 2
Beam 3
Beam 4
Pol A
Pol B
20
30
40
50
OMT
BPF
LNA D/C
Amp
Uplink Connectivity Switching
IMUX
O2
O4
O1
O3
4 1 Inverse IMUX
a
b
c
d
230
Redundancy Switching
U/C
LO
+70 V
+100 V
EPC
TWTA
O-2
O-4
O-1
O-3
I-1
OMUX
L
520
530
540
550
Power Converter Unit
150
Frequency Source Unit
160

Figure 3

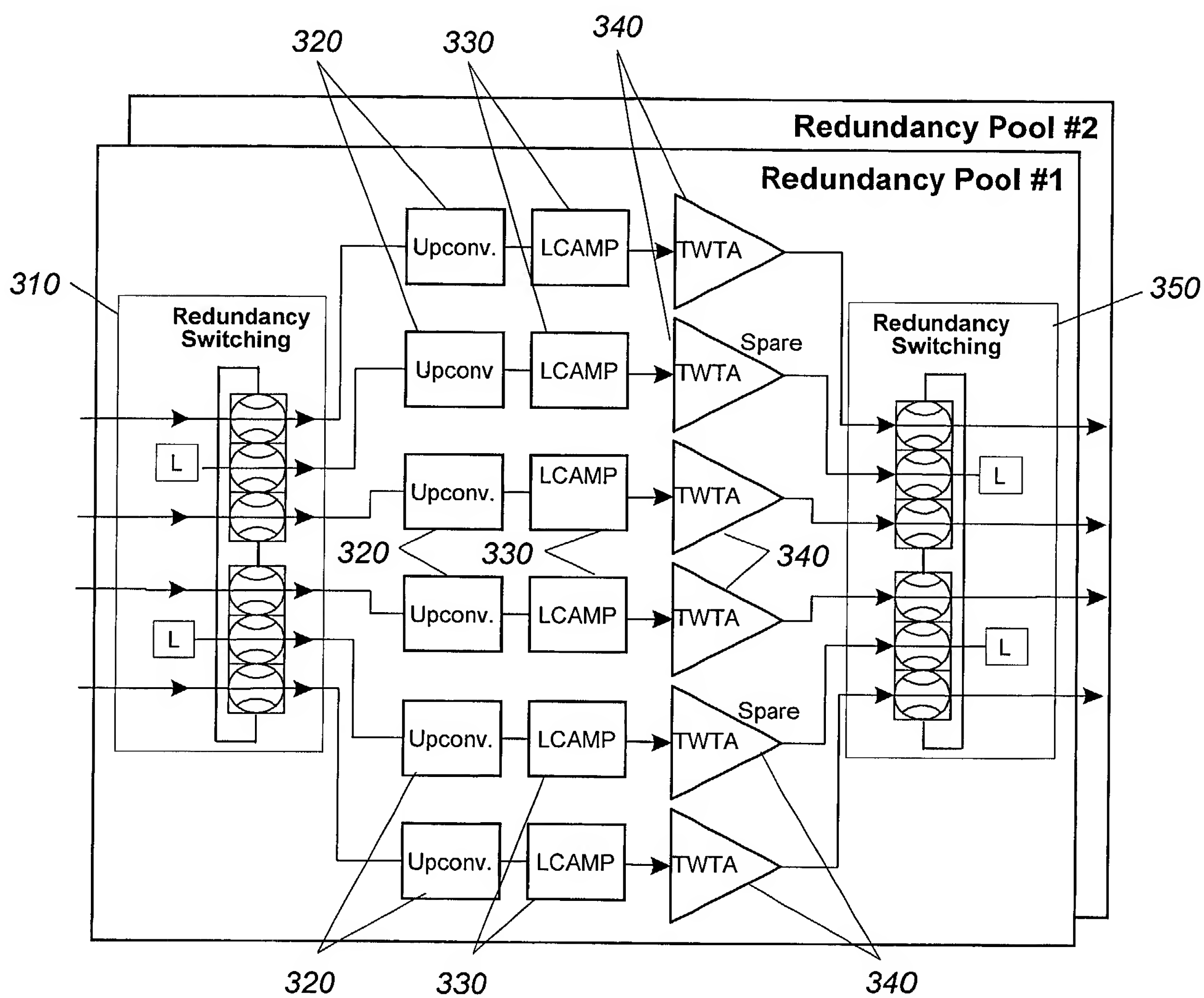
Redundancy Pool #2
Redundancy Pool #1
310
Redundancy
Switching
L
L
320
330
340
Upconv.
Upconv
Upconv.
Upconv.
Upconv.
Upconv.
LCAMP
LCAMP
LCAMP
LCAMP
LCAMP
LCAMP
TWTA
Spare
TWTA
TWTA
TWTA
Spare
TWTA
TWTA
320
330
340
Redundancy
Switching
L
L
350
320
330
340

Figure 4

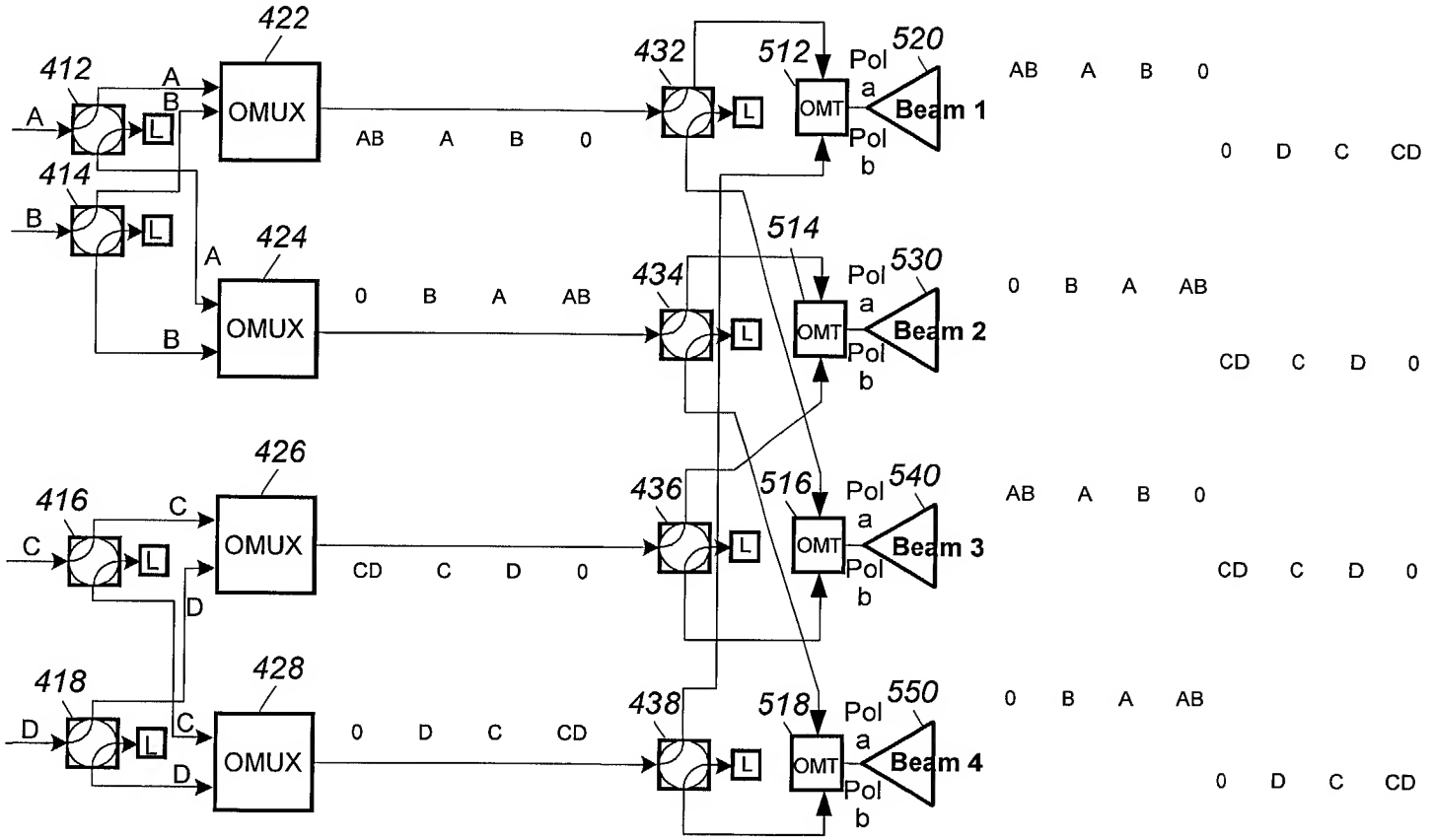

Figure 5

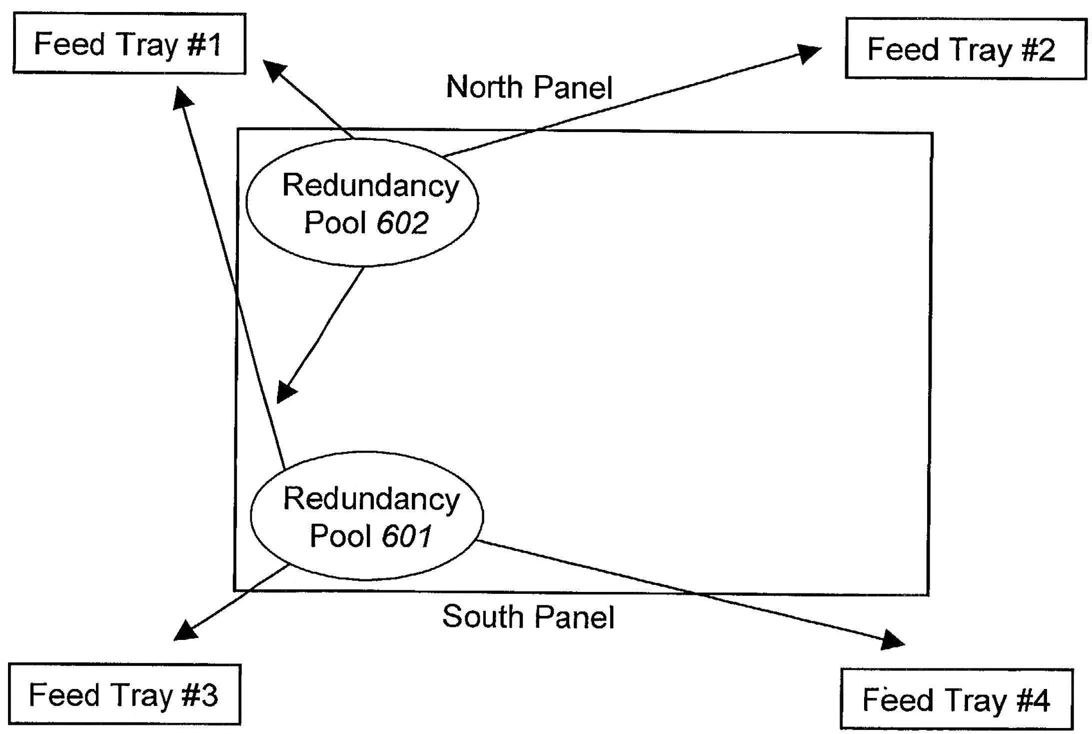
Feed Tray #1
Feed Tray #2
North Panel
Redundancy
Pool 602
Redundancy
Pool 601
South Panel
Feed Tray #3
Feed Tray #4

Figure 6